

[0032] The reinforcement material 134 may provide support by stiffening the struts 119 in the upper support portion 114, and/or the lower support portion 116, to produce lock down or near lock down in these areas. In one exemplary aspect, the reinforcement material 134 may be used in just the upper support portion 114 as lock down in this area may be important for supporting the weight of the wearer's breasts. The reinforcement material 134 may comprise a high modulus material such as thermoplastic polyurethane (TPU), silicone, polyurethane, and the like. In one aspect, the TPU used in at least 1 mm in thickness, providing a greater degree of lock down. It will be appreciated that the reinforcement material may, in some aspects, be 1 mm to 2 mm thick.

[0033] The reinforcement material 134 may provide greater design control and accommodate finer support structures using complex patterns or configurations. The pattern of the webbed configuration 136 may be used to distribute key structural forces in specific directions. The struts 119 and openings 118 can be placed to distribute force and provide support and flexibility.

[0034] In some aspects, the reinforcement material 134 may be modulated to fine-tune or customize support. For example, the reinforcement material 134 may be modulated depending on breast size, desired level of support, or user-specific sizing information and/or chest mapping (e.g., topographical data from a body scan or motion data). In one aspect the thickness of the reinforcement material 134 may remain the same while the width of the reinforcement material 134 may vary to increase or decrease elasticity or lock down in specific regions of the upper support portion 114 and/or the lower support portion 116. For example, the width of the reinforcement material 134 may decrease/taper in regions of the webbed configuration 136 that approach the breast cup portions 112. Such an approach may make the bra easier to doff and don, for example. In another example, the width of the reinforcement material 134 may remain constant and the thickness may vary to increase or decrease elasticity or lock down in specific regions of the upper support portion 114 and/or the lower support portion 116. For instance, the thickness of the reinforcement material 134 may decrease/taper in regions of the webbed configuration 136 that approach the breast cup portions 112. In yet another exemplary aspect, both the thickness and the width of the reinforcement material 134 may be adjusted to fine tune the modulus of elasticity in certain areas of the upper support portion 114 and/or the lower support portion 116.

[0035] In yet another example, the reinforcement material 134 may be modulated based on breast size. For example, for smaller sizes, less support may be needed and thus the width and/or thickness of the reinforcement material 134 may be decreased or omitted from select struts 119 in the webbed configuration 136. In contrast, for larger sizes or where a greater amount of support may be desired, the width and/or thickness of the reinforcement material 134 may be increased and any gradients in the reinforcement material 134 may be smaller or less pronounced. It will be appreciated that the reinforcement material 134 may be designed as a single, whole piece of reinforcement material 134 that corresponds to the webbed configuration 136 of both the upper support portion 114 and the lower support portion 116. In another aspect, the reinforcement material 134 may be designed as a single, whole piece of reinforcement material 134 that corresponds to the webbed configuration 136 of the

upper support portion 114. Further, the reinforcement material 134 may be designed as a separate piece (separate from the reinforcement material 134 for upper support portion 114) that has a shape corresponding to the webbed configuration 136 of the lower support portion 116. Any and all aspects, and any variation thereof, are contemplated as being within aspects herein.

[0036] While FIG. 6A depicts the reinforcement material 134 on the upper support portion 114, it will be appreciated that the reinforcement material 134 may also be on the lower support portion 116 if additional support is desired. In that instance, the thickness and/or width of the reinforcement material 134 may be greater on the upper support portion 114 than the lower support portion 116.

[0037] Referring next to FIG. 3, an exemplary bra 300, which may comprise the bra 100, comprising two or more layers of material is shown. The layer of material 132 has an external facing surface 120 and a second opposite-facing surface (not shown). A second layer of material 122 may be optional in aspects and may be used for modesty purposes and/or to provide a color-contrast effect to the webbed portion of the bra 300. Under band 126 may, in exemplary aspects, may help to connect the layer of material 132 and the optional second layer of material 122 at a lower region of the bra 300. Alternatively, under band 126 may be separate from the two layers of material 132 and 122 and may be attached to second layer of material 122 and the layer of material 132 by any reasonable method for attaching material.

[0038] With reference to FIGS. 4 and 5, the exemplary bra 300 with two or more layers of material is depicted in accordance with aspects herein. FIG. 4 depicts a back view of the bra 300. The single layer of material 132 and the second layer of material 122 are attached at perimeter edges 130 of the materials 122 and 132 as shown in FIG. 5. In other words, the breast cup portion 112, the upper support portion 114 and the lower support portion 116 of the layer of material 132 are not attached and/or are unaffixed to the second layer of material 122 except at the perimeter edges 130 such that the layer of material 132 is freely moveable with respect to the second layer of material 122 except at the perimeter edges 130. As such the breast cup portion 112, upper support portion 114, and lower support portion 116, can move freely of the second layer of material 122 providing more flexibility and stretch for the individual wearing the bra 300. It will be appreciated that the attachment of the layers of material 122 and 132 may be done in any variety of ways.

[0039] With reference to FIG. 7, an exemplary method 700 of making an exemplary support garment, such as the bra 100, as described herein is provided. A first layer of material, such as the layer of material 132 is provided at step 702. The first layer of material is manipulated (i.e., cut or incised) to form breast cup portions, and upper and lower support portions at step 704. A plurality of openings are formed in the first layer of material at the upper and lower support portions at step 706 leaving strut portions remaining. After preparation, the support garment comprises an external facing surface and an internal facing surface.

[0040] Reinforcement material (such as TPU) is manipulated (i.e., cut or incised) at step 708 to have a shape corresponding to the pattern of openings and struts of the first layer of material. It will be appreciated that in some instances the reinforcement material may not be cut for all